Graduation Plan
Master of Science Architecture, Urbanism & Building Sciences

Master of Science Architecture, Urbanism & Building Sciences

**Graduation Plan: All tracks**

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before

P2 at the latest.

The graduation plan consists of at least the following data/segments:

|  |
| --- |
| **Personal information** |
| Name | Isamu Goiati |
| Student number | 5724090 |

|  |  |
| --- | --- |
| **Studio**  |  |
| Name / Theme | MEP |
| Main mentor | Claudiu Forgaci | Urbanism |
| Second mentor | Achilleas Psyllidis | Urban Analytics Lab |
| Argumentation of choice of the studio | The multi-layered approach from the studio fits really well into my project. I think that the flow/process perspective from the studio and considering the city as a dynamic system connects with my approach and topic. The flows of tourists through cities is a complex system which also has to be approached in such a way. Therefore I think the systemic thinking and designing places element in the studio is also something that connects to my thesis. I see it as essential for creating urban environments that are shaped and connected with these flows. |

|  |
| --- |
| **Graduation project**  |
| Title of the graduation project | Detourism; Exploring spatiotemporal strategies to mitigate over­tourism and enhance urban livability. |
| **Goal**  |
| Location: | Amsterdam |
| The posed problem,  | Amsterdam faces growing challenges with overtourism, as current strategies fail to address its systemic drivers and rely on symptom-focused solutions. The digital era presents opportunities to leverage new sources of data for understanding the dynamics of tourists within the urban environment, yet these tools are underutilised. To mitigate overtourism, Amsterdam must integrate data-driven insights with its multi-core urbanisation strategy, ensuring sustainable and effective management of tourism pressures. |
| research questions and  | How can a data-informed strategy, based on spatiotemporal and morphological urban dimensions, be developed to better understand and address overtourism in Amsterdam?1. What are the current moments, places and impacts of overtourism in Amsterdam?
2. What are the spatiotemporal dynamics of tourism flows in Amsterdam?
3. How does the urban environment influence the impact of tourist pressure on liveability?
4. How can a data-informed strategy contribute to adressing overtourism in Amsterdam?
 |
| design assignment in which these result.  | The thesis will provide 3 outcomes, 2 of these are a design assignment.From the analysis, design goals are set for both the multi core system as the new core. * The strategy will be a strategic design. It will focus on the characteristics of the new cores and the relationships between them and between the current cores. The requirements set for the multi-core strategy connect to the idea of creating cores needing to have a distinct image each. This than being connected to how these images can play a role in taking in tourism pressure, resulting in the multi core strategy.
* With the character of the new core in mind, the Bijlmer ArenA, a design is made for the new core. This design will zoom in to a smaller scale and also look on street level how liveability can be influenced, based on the findings from the analytical outcome. The Bijlmer Arena is an area which has unique and extreme characteristics, making it a challenging but interesting design assignment.
 |
| [This should be formulated in such a way that the graduation project can answer these questions.The definition of the problem has to be significant to a clearly defined area of research and design.] |
| **Process**  |
| **Method description**  |
| * Literature Review: Explores what drives tourist activities in Amsterdam, identifying elements and areas that experience overtourism, and looking at the consequences of it. It also reviews current municipal strategies, particularly the multi-core strategy, as a solution for mitigating overtourism. This forms the basis for identifying tourist activities and assessing the urban planning context.
* Media Content Analysis: Analyses media, news, documentaries, and online platforms to pinpoint when, where, and how overtourism impacts liveability in Amsterdam. This method helps understand the temporal and spatial aspects of overtourism.
* Data Scraping and Manipulation: Collects data from Google Maps (reviews and Popular Times) to analyse tourist dynamics. Data is processed to anonymise users and link busyness data with specific locations, neighbourhoods, and districts. By comparing review frequency with busyness, the tourist share in urban activity is determined.
* Spatiotemporal and Morphological Analysis: Maps tourist movement patterns over time and across spaces to identify hotspots of overtourism, based on the processed data. These patterns are combined with an analysis of neighbourhood morphology to understand how the urban environment influences tourist pressure and liveability.
* Reference Project Analysis: Studies similar projects and the Bijlmer ArenA area to understand how new urban cores can be designed to absorb tourism pressure. Insights from these analyses inform design goals for the multi-core strategy and the Bijlmer ArenA core.
* System Design: Develops a multi-core strategy to distribute tourism pressures across distinct cores, each with a unique identity. This strategy aims to shift tourist flows away from oversaturated areas.
* Research by Design: Combines iterative design processes with data and insights from all methods to refine the multi-core strategy and create a specific design for the Bijlmer ArenA core. Prototyping and scenario testing address complex challenges and inform the final design.

**Several blue rectangular shapes with black text  Description automatically generated with medium confidence****The methodological Framework** |

|  |
| --- |
| **Literature and general practical references**Google maps data will be used mostly in the thesis, this data is anonymised. Other forms of data that will be used are, municipal and OSM data for the morphological analysis. Top 5 important literature, full list can be found at end of document* Amsterdam Municipality. (2021). Omgevingsvisie Amsterdam 2050 Een menselijke metropool.
* Amsterdam Municipality. (2022). Nota overlast en overtoerisme.
* Koens, K., Postma, A., & Papp, B. (2018). Is overtourism overused? Understanding the impact of tourism in a city context. Sustainability (Switzerland), 10(12). <https://doi.org/10.3390/su10124384>
* Möhring, M., Keller, B., Schmidt, R., & Dacko, S. (2020). Google Popular Times: towards a better understanding of tourist customer patronage behavior. Tourism Review, 76(3), 533–569. <https://doi.org/10.1108/TR-10-2018-0152>
* Zelenka, J. ;, & Kacetl, J. (2014). The Concept of Carrying Capacity in Tourism. In Amfiteatru Economic Journal (Vol. 16, Issue 36). <http://creativecommons.org/licenses/by/4.0/>
 |
| **Reflection** |
| 1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

My graduation topic focuses on mitigating overtourism in Amsterdam through a multi-core strategy informed by spatiotemporal data. The MEP studio emphasis on systemic thinking and the flow/process perspective directly supports my approach to understanding the dynamics of tourist movements as part of a complex urban system. Looking at tourism in Amsterdam as a system, and therefore also making a strategy and design from a system perspective aligns with the studio focus. The studio’s expertise equips me with tools to create my research on distributing tourism pressures.The Urbanism track, which emphasizes critical analysis of urban environments and proposing sustainable solutions for liveable urban systems, is in my eyes exactly what I try to achieve with my thesis. My topic addresses a global challenge in innovative way, and tries to answer questions with systemic thinking and with data-driven urban planning. The combination of a strong scientific basis and creating a new method for me really aligns with the Delft Urbanism vision. The master programme supports this integration of academic and practical approaches. Its interdisciplinary focus equips me with the ability to address complex urban challenges, like overtourism, by combining spatial design, systemic analysis, and innovative urban strategies. My project is a clear embodiment of the programme’s ambition to bridge global and local trends through comprehensive urban solutions. 1. What is the relevance of your graduation work in the larger social, professional and scientific framework.

Overtourism is a multifaceted and complex issue, increasingly recognized as one that needs to be understood within the broader context of societal and urban development (Koens et al., 2018). As the side effects of tourism have started to become more and more evident, the concept of overtourism became increasingly widespread amongst experts. Consequently, it has become a popular topic that has attracted the attention of researchers (Gülşen et al., 2021). In academia, overtourism has become commonplace overnight, too. Whereas it was largely nonexistent prior to 2017, no less than four Special Issues of academic journals and three edited books on the topic will come out in 2018 and 2019. The marketability and popularity of the term overtourism appears to be at least partially accountable for its entry in academia, rather than its explanatory value (Koens et al., 2018). This work contributes to the evolving field by taking a new, data-driven approach to analyse spatiotemporal patterns, offering a new way to measure and understand how urban spaces are used. By incorporating media data it provides insights that go beyond traditional data sources. The larger social relevance of the thesis lies in addressing the challenges of overtourism to better understand and manage the flow of tourists in the city. By looking at efficient space and time use, the research can inform sustainable urban planning strategies, reduce strain on heavily visited areas and enhance the quality of life for residents while maintaining an enjoyable experience for visitors. This work contributes to creating balanced urban environments, where tourism benefits the economy without compromising local communities or the ecological integrity of the city. |

Full references list:

Abner Li. (2024). *Google Maps now has over 2 billion monthly users*. https://9to5google.com/2024/10/29/google-maps-2-billion/

Amsterdam Municipality. (2021). *Omgevingsvisie Amsterdam 2050 Een menselijke metropool*.

Amsterdam Municipality. (2022). *Nota overlast en overtoerisme*.

Amsterdam Municipality. (2023). *Monitor Attracties MRA Stand van zaken eind 2022 Onderzoek en Statistiek*.

Amsterdam Municipality. (2024). *Toeristische draagkracht van wijken in Amsterdam in 2023 Onderzoek en Statistiek*.

Anna Holligan. (2023). *Amsterdam launches stay away ad campaign targeting young British men*. https://www.bbc.com/news/world-europe-65107405

ARCAM. (2023). *VOL! Gesprek over de meerkernige stad*.

Blane Bachelor. (2025). *Overtourism was the buzzword of 2024. This summer looks to be just as crowded and chaotic*. https://edition.cnn.com/travel/overtourism-2025-summer-crowded-chaotic/index.html

Bukart, A. J., & Medlik, S. (1974). *Tourism: Past, Present and Future*.

Butler, R. W. (2020). Tourism carrying capacity research: a perspective article. In *Tourism Review* (Vol. 75, Issue 1, pp. 207–211). Emerald Group Holdings Ltd. https://doi.org/10.1108/TR-05-2019-0194

Casson, L. (1994). *Travel in the Ancient World*. Johns Hopkins University Press. https://doi.org/10.56021/9780801848087

Cheer, J. M., & Novelli, M. (2023). *Annual Meeting of the Global Future Councils*. https://www.weforum.org/agenda/2023/10/what-is-overtourism-and-how-can-we-overcome-it/

David Hielkema. (2024, May 31). Nog nooit zoveel bezoekers in Amsterdam als in 2023 (en toeristen blijven langer). *Het Parool*.

Dodds, R., & Butler, R. W. (2019). The enablers of overtourism. In *De Gruyter Studies in Tourism* (Vol. 1, pp. 6–21). Walter de Gruyter GmbH. https://doi.org/10.1515/9783110607369-002

Gülşen, U., Yolcu, H., Ataker, P., Erçakar, İ., & Acar, S. (2021). Counteracting overtourism using demarketing tools: A logit analysis based on existing literature. *Sustainability (Switzerland)*, *13*(19). https://doi.org/10.3390/su131910592

Harry Robinson. (1976). *A geography of tourism.*

Het Is Genoeg. (2023). *HET IS GENOEG! Amsterdams platform tegen Overtoerisme*. https://onderzoek.amsterdam.nl/publicatie/bezoekersprognose-2023-2025

Hillier, B., Burdett, R., Peponis, J., & Penn, A. (1987). Creatl’ng Life: Or, Does Architecture Determine Anything 7. In *Arch. 8 Comport./Arch. Behav* (Vol. 3, Issue 3).

Hillier, B., & Iida, S. (2005). *LNCS 3693 - Network and Psychological Effects in Urban Movement*. http://www.bartlett.ucl.ac.uk/

Hui, C. (2006). Carrying capacity, population equilibrium, and environment’s maximal load. In *Ecological Modelling* (Vol. 192, Issues 1–2, pp. 317–320). Elsevier. https://doi.org/10.1016/j.ecolmodel.2005.07.001

Kharas, H. (2017). *THE UNPRECEDENTED EXPANSION OF THE GLOBAL MIDDLE CLASS AN UPDATE*. https://www.brookings.edu/about-us/annual-report/.

Koens, K., Postma, A., & Papp, B. (2018). Is overtourism overused? Understanding the impact of tourism in a city context. *Sustainability (Switzerland)*, *10*(12). https://doi.org/10.3390/su10124384

Möhring, M., Keller, B., Schmidt, R., & Dacko, S. (2020). Google Popular Times: towards a better understanding of tourist customer patronage behavior. *Tourism Review*, *76*(3), 533–569. https://doi.org/10.1108/TR-10-2018-0152

O’reilly, A. M. (1986). *Tourism carrying capacity Concept and issues*.

Pawar, S. (2024). *Google Maps Statistics 2024 By Usage, Revenue, Accuracy, Traffic Data, Trends, Web Usage and API Usage*. https://www.enterpriseappstoday.com/stats/google-maps-statistics.html#Google\_Maps\_Statistics\_by\_Demographics

Pierce. (1982). *The Social Psychology of Tourist Behaviour*. Elsevier. https://doi.org/10.1016/C2013-0-03367-1

Sabine Lubbe Bakker. (2016). *Slapend rijk*. VPRO Tegenlicht. https://www.vpro.nl/programmas/tegenlicht/kijk/afleveringen/2016-2017/slapend-rijk.html

Salas-Olmedo, M. H., Moya-Gómez, B., García-Palomares, J. C., & Gutiérrez, J. (2018a). Tourists’ digital footprint in cities: Comparing Big Data sources. *Tourism Management*, *66*, 13–25. https://doi.org/10.1016/j.tourman.2017.11.001

Salas-Olmedo, M. H., Moya-Gómez, B., García-Palomares, J. C., & Gutiérrez, J. (2018b). Tourists’ digital footprint in cities: Comparing Big Data sources. *Tourism Management*, *66*, 13–25. https://doi.org/10.1016/j.tourman.2017.11.001

Schmöcker, J. D. (2021). Estimation of city tourism flows: challenges, new data and COVID. In *Transport Reviews* (Vol. 41, Issue 2, pp. 137–140). Routledge. https://doi.org/10.1080/01441647.2020.1850221

Schuh, B., Derszniak-Noirjean, M., Gaugitsch, R., Sedlacek, S., Weismayer, C., Zekan, B., Gunter, U., Dan, D., Nixon, L., Mihalič, T., Kuščer, K., Novak, M., & Alohas, P. (2020). *Final Report*. www.espon.eu.

Statista. (2024). *Number of scheduled passengers boarded by the global airline industry from 2004 to 2024*. https://www.statista.com/statistics/564717/airline-industry-passenger-traffic-globally/

Tourism Economics. (2024). *wtm-global-travel-report-2024.pdf.coredownload.307954965*.

Towner, J. (1985). THE GRAND TOUR A Key Phase in the History of Tourism. In *Annals of TourismResearch* (Vol. 12).

Tufft, C., Constantin, M., Pacca, M., Mann, R., & Gladstone, I. (2024). *The state of tourism and hospitality 2024*.

Turner, L., & Ash, J. (1975). *The golden hordes : international tourism and the pleasure periphery*.

Zelenka, J. ;, & Kacetl, J. (2014). The Concept of Carrying Capacity in Tourism. In *Amfiteatru Economic Journal* (Vol. 16, Issue 36). http://creativecommons.org/licenses/by/4.0/

Zhang, L., Pan, B., Smith, W., & Li, X. (Robert). (2009). An Exploratory Study of Travelers’ Use of Online Reviews and Recommendations. *Information Technology & Tourism*, *11*(2), 157–167. https://doi.org/10.3727/109830509789994775